

Peristylus gracilis (Orchidaceae): An addition to the flora of Andaman & Nicobar Islands, India

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Abstract

Peristylus gracilis Blume (Orchidaceae) is reported here for the first time from Andaman & Nicobar Islands. A brief description with illustration and photographs is provided for easy identification.

Keywords: Great Nicobar Island, new report, terrestrial orchid

Introduction

The genus *Peristylus* Blume belongs to the subfamily Orchidoideae. It is represented by c. 70 species (Chen *et al.*, 2009) distributed in Eastern Asia, South Asia, South-East Asia to New Guinea, North-Eastern Australia and the South-West Pacific islands (Chen *et al.*, 2009). The general morphology of the genus is very similar to that of *Habenaria* Willd. and *Pecteilis* Raf. About 29 species and 2 varieties have been recorded from India (Misra, 2007) of which 4 species are reported from Andaman & Nicobar Islands (Pandey & Diwakar, 2008; Karthigeyan *et al.*, 2010). Amongst these, *P. balakrishnanii* Karthigeyan *et al.* was recently reported from Rutland Island as new species by Karthig. *et al.* (2010). The remaining 3 species, viz. *P. manii* (Rchb.f.) Mukerjee and *P. monticola* (Ridl.) Seidenf. are confined to Andaman Islands, while *P. parishii* Rchb.f. occurs in both Andaman as well as Nicobar Islands.

During floristic explorations in Nicobar group of Islands, a few specimens belonging to the genera *Peristylus* were collected from Great Nicobar Island which on critical study were identified as *Peristylus gracilis* Blume. A thorough scrutiny of literature (Kumar & Manilal, 1994; Sinha, 1999; Misra, 2007; Pandey & Diwakar, 2008; Karthigeyan *et al.*, 2010) revealed that this species was hitherto not recorded from Andaman & Nicobar Islands. Hence, in the present treatment the species is reported as a new addition to the orchid flora of Andaman & Nicobar Islands. A brief description

along with illustration and photographs (Fig.1 & 2) is provided to facilitate easy recognition of this species.

Peristylus gracilis Blume, Bijdr. Fl. Ned. Ind. 8: 404. 1825; J.J.Sm., Orch. Java 31. 1905; Deori & Malhotra, Ind. For. 103: 680. 1977; Seidnf., Dansk. Bot. Ark. 31 (3): 30, f. 11. 1977; Kataki, Orch. Meghalaya: 219. 1986; Comber, Orch. Java 69. 1990; Seidenf. & J.J.Wood, Orch. Penins. Malaysia Singapore 103. 1992; Comber, Orch. Sumatra 110. 2001; T.C. Hsu *et al.*, Taiwania 54: 381. 2009.

Fig. 1, 2

Type: Java, Blume s.n. (holotype L)

Habenaria bambusetorum Kraenzl., Annaire Conserv. Jard. Bot. Geneve 1: 107. 1897; Holtum, Fl. Malaya 1: 85. 1953.

Habenaria inconspicua Ridl., J. Fed. Malay States Mus. 4: 75. 1909, *nom. illeg., non Cogn.* 1907.

Habenaria zephyrica Ames, Orchidaceae 5: 16. 1915.

Terrestrial herbs, upto 30 cm high; tuber ellipsoid, 1.5 × 0.5 cm. Stem leafy at upper part, c. 13 cm long, bearing 3 tubular sheathing leaves below. Leaves 6–7, spreading near middle of stem, elliptic-ob lanceolate, acute to acuminate, c. 7.5 × 2.5 cm with undulate margins, sheathing at base. Inflorescence many flowered, peduncle c. 7 cm long, glabrous with 2–3 sheathing bracts; rachis



Fig. 1. *Peristylus gracilis* Blume: **a.** Habit; **b.** Flowers; **c.** Inflorescence; **d.** Leaves; **e.** Fruit; **f.** Tuber.

c. 11 cm long bearing 18–20 flowers; floral bracts light green, lanceolate, 4 mm long, acuminate at apex. Flowers c. 1.2 cm long, light green, scented; pedicel with ovary c. 0.9 cm long, longer than floral bracts; dorsal sepal and petals form a hood over the column. Dorsal sepal ovate or ovate-lanceolate, concave, c. 3.5×1.5 mm, apiculate at apex; lateral sepals spreading, concave, lanceolate, c. 4×1.5 mm, apiculate at apex; petals obliquely triangular, shallowly concave, c. 3×1.5 mm, thinly

textured, apex acute. Lip deeply 3-lobed, lateral lobes spreading, thread-like, linear lanceolate, often curled, 4–5 mm long; mid lobe triangular-lanceolate, c. 2×1 mm, acute at apex; spur subcylindric, c. 7×1 mm, fusiform-clavate below with swollen upper part. Column c. 1 mm long with large auricles on both sides; stigma small, placed near to the auricles; rostellum minute, triangular, emarginate at apex. Capsule c. 1.5×0.4 cm, elliptic fusiform with an apical beak.

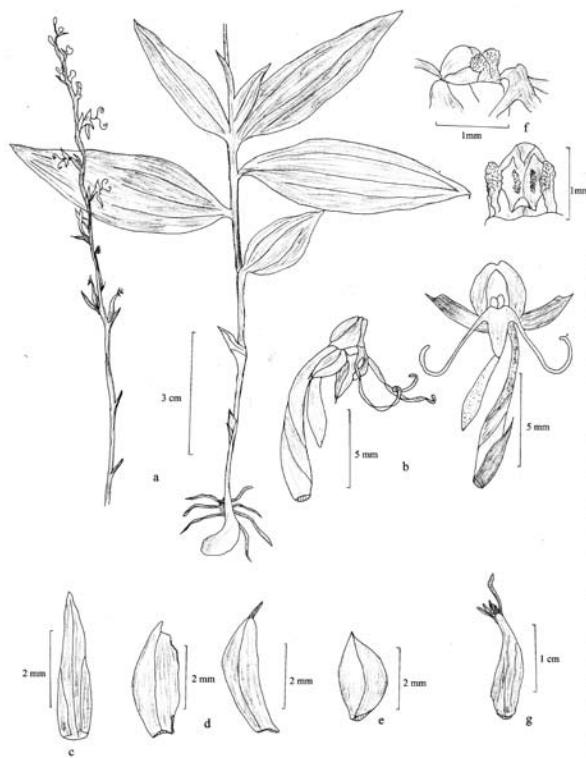


Fig. 2. *Peristylus gracilis* Blume: **a.** Habit; **b.** Flower (side & front views); **c.** Floral bract; **d.** Sepals (dorsal & lateral); **e.** Petal; **f.** Column (front & side views); **g.** Fruit (*Joju P. Alappatt* 390; PBL).

Flowering & Fruiting: June – January.

Habitat: A rare ground orchid found growing amidst dense and moist ground vegetation along with *Selaginella* sp. at an elevation of about 75 m.

Distribution: India [Andaman & Nicobar Islands (present report), Meghalaya] Taiwan, Vietnam, Thailand, Malaysia, Indonesia and Philippines.

Specimens examined: INDIA, **Andaman & Nicobar Islands**, Great Nicobar Island, 16 km on East -West Road, 12.12.2011, *Joju P. Alappatt* 390 (PBL); **Meghalaya**, Jaintia Hills District, forest East of Jarain I.B. along the hill slope, 28.06.1973, N.C. Deroi 51742 (ASSAM).

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